

Lead Auditor Training on Artificial Intelligence Management System (AIMS) based on ISO/IEC 42001:2023

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COURSE DESCRIPTION

The ISO/IEC 42001 Lead Auditor Training is a comprehensive and immersive program designed to develop professionals capable of auditing Artificial Intelligence Management Systems (AIMS) in line with the world's first AI management system standard. This course goes beyond theory, providing a practical and structured approach to understanding how organizations govern, implement, and control AI systems responsibly across their lifecycle. Participants begin by building a strong foundation in artificial intelligence, including key concepts, terminology, machine learning, and real-world applications. The course then explores the growing importance of big data, ethical principles, and societal implications, helping learners understand how bias, privacy, and data quality influence AI outcomes. A core focus of the training is ISO/IEC 42001:2023, including its structure, clauses, and Annex A controls. Learners will gain a deep understanding of how to implement and audit an AIMS using the PDCA (Plan-Do-Check-Act) cycle, while aligning with associated standards such as ISO/IEC 42005 (impact assessment) and ISO/IEC 42006 (audit requirements). The course also addresses the global regulatory landscape, including emerging AI laws and frameworks, enabling participants to evaluate compliance across jurisdictions. You will learn how to assess AI risks and impacts, maintain risk registers, and verify that organizations are not only compliant but also ethically responsible and transparent in their AI practices. A significant portion of the training is dedicated to auditing principles and techniques. Participants will develop the skills needed to plan audits, collect and evaluate evidence, identify non-conformities, and produce professional audit reports. Practical exercises, role-play scenarios, and real-world case studies ensure that knowledge is applied in a meaningful and realistic context. By the end of the course, participants will be fully equipped to lead AIMS audits, make certification recommendations, and contribute to building trustworthy, secure, and compliant AI systems within their organizations or client environments.

AUDIENCE PROFILE

- This course is ideal for:
- Compliance Officers and Risk Managers
- IT and Information Security Auditors seeking specialization in AI
- Consultants supporting AI governance and ISO implementations
- Quality Managers in technology-driven industries
- AI Governance Leads and Data Protection Professionals
- Professionals involved in risk, compliance, or regulatory oversight of AI systems

PREREQUISITES

- Basic understanding of AI, data science, or data analysis concepts

- Familiarity with ISO management systems (e.g., ISO 9001, ISO 27001) is beneficial
- Access to ISO/IEC 42001 standard (required)
- Access to general-purpose AI tools (e.g., ChatGPT, Gemini, Copilot)

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- Gain expertise in auditing AI Management Systems aligned with ISO/IEC 42001
- Understand the full AI lifecycle, including governance, risk, and impact
- Learn how to evaluate ethical, technical, and regulatory aspects of AI
- Develop practical audit skills using global standards and methodologies
- Enhance audit credibility using ISO/IEC 42006 requirements
- Identify and assess AI risks using ISO/IEC 42005 impact assessments
- Build competence to support AI compliance and certification initiatives
- Prepare for emerging regulations such as the EU AI Act
- Strengthen organizational trust through transparent and responsible AI practices

COURSE OUTLINE

Module 1

- AI Fundamentals – Terminology, classes of AI, machine learning, and applications
- Big Data & Ethics – Data privacy, bias, societal impact, and ethical frameworks
- AI Management Systems – ISO/IEC 42001:2023 structure, clauses, and controls
- Associated Standards – ISO/IEC 42005, 42006, and supporting frameworks
- Legal & Regulatory Landscape – Global AI laws and compliance requirements
- AI Roles & Governance – Organizational structures and responsibilities within AIMS
- AI Risk & Impact Assessment – Risk management, impact analysis, and registers
- Data Governance – Validation, privacy, security, and data quality considerations
- Auditing Standards – ISO 19011, ISO 17021, and AI audit-specific requirements
- AIMS Audit Process – Planning, conducting, reporting, and certification audits
- Non-Conformities & Corrective Actions – Identification, classification, and resolution
- Audit Simulation – Role-play exercises, case studies, and real-world scenarios

DELIVERY NOTE

- Structured lectures and clause-by-clause explanations
- Real-world case studies and industry examples
- Hands-on exercises and homework assignments
- Role-play simulations and audit scenarios
- Group discussions and Q&A sessions
- Continuous recaps and knowledge reinforcement